AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter.

1. (Currently Amended) A method in a video decoding system for adapting to resource constraints, said method comprising steps of:

configuring a first resource access priority assignment to a plurality of resource consuming operations, each resource consuming operation being assigned a priority according to the first resource access priority assignment;

configuring a second resource access priority assignment that is different than the first resource access priority assignment to the plurality of resource consuming operations, each resource consuming operation being assigned a priority according to the second resource access priority assignment;

receiving a user input corresponding to performing a second media processing task, said second media processing task corresponding to a second amount of resource consumption, said user input being received while performing a first media processing task according to the first configured resource access priority assignment, said first media processing task corresponding to a first amount of resource consumption;

responsive to the user input determining whether a resource constrained mode is to be initiated to perform simultaneously the first and second media processing tasks; and

responsive to determining that the resource constrained mode is to be initiated, initiating the resource constrained mode according to the second configured ~~including modifying a~~ resource access priority assignment.

2. (Currently Amended) The method of claim 1, wherein the the first media processing task includes a first operation and the ~~resource access priority is a~~ priority ~~that a component is~~ assigned ~~for accessing a data bus~~ to the first operation is different in the first and second resource access priority assignments, said first operation corresponding to an amount of consumption of a data bus.

3. (Currently Amended) The method of claim 2, wherein the ~~component is selected from a group consisting of:~~ first operation corresponds to at least one from the group consisting of: a processor, ~~a video decoder,~~ an audio decoder, a video digital encoder, a memory buffer, a data storage device, and a digital to analog converter.

4. (Currently Amended) The method of claim 1, wherein the ~~resource access priority is a~~ priority ~~that a component is~~ assigned ~~for accessing a data bus~~ to a first operation is different in the first and second resource access priority assignments, said first operation corresponding to an amount of consumption of a data bus while performing a specific function.

5. (Original) The method of claim 4, wherein the specific function is selected from a group consisting of:

writing data to a compressed audio buffer, writing data to a compressed video buffer, reading data from a compressed audio buffer, reading data from a compressed video buffer, writing data to a video picture buffer, writing data to a graphical data buffer, reading data from a graphical data buffer, writing data to an alpha-blend plane buffer, writing data to an off-screen buffer, writing data to an audio buffer, reading data from an audio buffer, reading data from an off-screen buffer, and reading data from an alpha-blend plane.

6. (Currently Amended) The method of claim 1, wherein the resource constrained mode corresponds to performing a constrained version of the first media processing task simultaneously with the second media processing task ~~access priority is a priority that a component is assigned for accessing a data storage device~~.

7. (Currently Amended) The method of claim 1, wherein the determining step includes determining that the resource constrained mode is to be initiated responsive to inadequate memory availability to perform simultaneously the first and second media processing tasks.

8. (Currently Amended) The method of claim 1, wherein the determining step includes determining that the resource constrained mode is to be initiated responsive to inadequate bus bandwidth availability to perform simultaneously the first and second media processing tasks.

9. (Currently Amended) The method of claim 1, wherein the ~~determining step includes determining that the resource constrained mode is to be initiated responsive to user interaction~~ first operation corresponds to decoding video.

10. (Original) The method of claim 16, wherein the resource constrained mode is one of a plurality of resource constrained modes that can be initiated.

11. (Currently Amended) The method of claim 16, wherein the user ~~interaction~~ input includes causing the video ~~decoding system~~ being processed to be output at a reduced ~~reduce~~ spatial resolution ~~of video output~~.

12. (Currently Amended) The method of claim 16, wherein the user ~~interaction~~ input includes causing graphics to be generated and output along with the video ~~output~~ being processed.

13. (Currently Amended) The method of claim 1, wherein the second configured resource access priority assignment comprises alternating the priority of at least one resource consumption operation between a first priority and a second priority.

14. (Currently Amended) The method of claim 13, wherein the ~~resource constraining service is an interactive program guide.~~ at least one resource consumption operation is assigned the first priority during intervals corresponding to each instance of a specific portion of an output video signal.

15. (Currently Amended) The method of claim ~~13~~ 14, wherein the at least one resource consumption operation is assigned the second priority outside the intervals ~~resource constraining service includes the presentation of a video and graphical data~~.

16. (Currently Amended) The method of claim 1, wherein the step of determining ~~step includes determining that~~ whether the resource constrained mode ~~should~~ is to be initiated further responsive to receiving a first data describing a video being processed in the first media processing first task ~~from a video transmitter data describing the received video input~~.

17. (Currently Amended) The method of claim ~~1~~ 16, wherein the video being processed ~~received video input~~ is encoded using a Motion Picture Experts Group (MPEG) encoding scheme.

18. (Currently Amended) The method of claim 1, wherein the second resource access priority assignment ~~modification in resource access priority~~ is responsive to a degree of resource constraint to perform simultaneously the first and second media processing tasks;.

19. (Original) The method of claim 18, wherein the degree of resource constraint is determined in view of an amount of resource availability and an amount of additional resource needed.

20. (Currently Amended) The method of claim 19, wherein the resource constraint includes a memory constraint.

21. (Currently Amended) The method of claim 19, wherein the resource constraint includes a memory bus bandwidth constraint.

22. (Currently Amended) The method of claim 19, wherein the amount of ~~additional~~ resource constraint needed is determined at least according to at least one look-up table.

23. (Currently Amended) The method of claim ~~19~~ 1, wherein the step of determining whether the resource constrained mode is to be initiated ~~the amount of additional resource~~

~~needed is determined at least~~ according to a history of resource need to perform the first media processing task ~~for an operation~~.

24. (Currently Amended) The method of claim [[19]] 1, wherein ~~a function for which resource access priority is modified is also based upon degree of resource constraint.~~the step of determining whether the resource constrained mode is to be initiated is according to a history of resource need to perform the second media processing task.

25. (Currently Amended) The method of claim [[19]] 1, wherein ~~a component for which resource access priority is modified is also based upon degree of resource constraint.~~the step of determining whether the resource constrained mode is to be initiated is according to a history of resource need to perform simultanelusly the first and second media processing tasks.

26. (Currently Amended) The method of claim 1, wherein the determining and initiating steps are performed by a processor in a digital home communication terminal.

27. (Original) The method of claim 1, wherein the initiating step includes continuing to present audio to a user at a regular rate and maintaining audio and video synchronization during the resource constrained mode.

28. (Original) The method of claim 1, further comprising a step of terminating the resource constrained mode responsive to determining adequate resource availability.

29. (Currently Amended) A video decoding system for adapting to resource constraints, said system comprising:

~~determination logic configured to determine whether a resource constrained mode is to be initialed; and~~

~~initiation logic configured to initiate the resource constrained mode responsive to the determination logic, including modifying a resource access priority~~.

logic for configuring a first resource access priority assignment to a plurality of resource consuming operations, each resource consuming operation being assigned a priority according to the first resource access priority assignment;

logic for configuring a second resource access priority assignment that is different than the first resource access priority assignment to the plurality of resource consuming operations, each resource consuming operation being assigned a priority according to thesecond resource access priority assignment;

logic for performing a first media processing task according to the first configured resource access priority assignment, said first media processing task corresponding to a first amount of resource consumption;

logic for performing simultaneosly the first media processing task and a second media processing task according to the second configured resource access priority assignment, said second media processing task corresponding to a second amount of resource consumption; and

logic for initiating a resource constrained mode according to the second configured resource access priority assignment for performing simultaneosly the first and second media processing tasks.

30. (Currently Amended) The system of claim 29, wherein the ~~determination~~ logic is further configured ~~to detemine that~~ for determining whether the resource constrained mode is to be initiated responsive to inadequate memory availability.

31. (Currently Amended) The system of claim 29, wherein the ~~determination~~ logic is further configured ~~to detemine that~~ for determining whether the resource constrained mode is to be initiated responsive to inadequate bus bandwidth availability.

32. (Currently Amended) A video decoding ~~method~~ system for adapting to resource constraints, said system comprising ~~the steps of~~:

logic for configuring a first resource access priority assignment to a plurality of resource consuming operations, each resource consuming operation being assigned a priority according to the first resource access priority assignment;

logic for configuring a second resource access priority assignment that is different than the first resource access priority assignment to the plurality of resource consuming operations, each resource consuming operation being assigned a priority according to the second resource access priority assignment;

logic for configuring at least one resource consumption operation in second configured resource access priority assignment with an alternating first priority and a second priority;

logic for performing a first media processing task according to the first configured resource access priority assignment, said first media processing task corresponding to a first amount of resource consumption; and

logic for performing simultaneously the first media processing task and a second media processing task according to the second configured resource access priority assignment, said second media processing task corresponding to a second amount of resource consumption.

~~determining that a resource access priority is to be modified; and~~

~~modifying the resource access priority accordingly~~.

33. (Currently Amended) The system of claim 32, wherein the logic is further configured for initiating a resource constrained mode according to the second configured resource access priority assignment for performing simultaneosly the first and second media processing tasks ~~determining step is responsive to a step of determining that at least one resource is constrained~~.

34. (Currently Amended) The method of claim 2, wherein the first operation corresponds to a data access operation by a processor ~~32, wherein the determining step is responsive to a user requesting a resource constraining service~~.